Attorney's Docket No.:14871-083001

Applicant: Hiraku Itadani et al.

Serial No.: 09/891,053 Filed: June 25, 2001

In the claims:

Please amend the claims as follows:

- 1-7. (Canceled)
- 8-25. (Canceled)
- 26. (Withdrawn) A method of producing a polypeptide, the method comprising culturing the cultured host cell of claim 20 under conditions that permit expression of the polypeptide in the cell.
- 27. (Withdrawn) A method for identifying a compound that modulates a G protein-coupled receptor activity, comprising the steps of:
- a) contacting a polypeptide of claim 1, or a cell transected with a nucleic acid encoding the polypeptide of claim 1, with a test compound;
- b) determining whether the test compound modulates a G protein-coupled receptor activity of the polypeptide or cell,

thereby identifying a compound that modulates a G protein-coupled receptor activity.

- 28. (Withdrawn) The method of claim 27, wherein the G protein-coupled receptor activity is histamine binding.
- 29. (Withdrawn) The method of claim 27, wherein the G protein-coupled receptor activity is changing cellular cAMP concentration, changing cellular calcium concentration, activating a G protein, activating phospholipase C, or changing intracellular pH.
 - 30. (Canceled)
- 31. (Original) A substantially pure polypeptide, the sequence of which consists of SEQ ID NO:20 or 25.

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32-35. (Canceled)

(New) A substantially pure polypeptide comprising the amino acid sequence of 36. SEQ ID NO:20 or 25, with up to 3 conservative amino acid substitutions.

- (New) A substantially pure polypeptide comprising an amino acid sequence at 37. least 99% identical to SEO ID NO:20 or 25.
- 38. (New) The polypeptide of claim 36 or 37, wherein said polypeptide has seven transmembrane regions and the activity of a G protein-coupled receptor protein.
- 39. (New) The polypeptide of claim 38, wherein the G protein-coupled receptor protein activity is binding to histamine.
- 40. (New) A substantially pure polypeptide comprising the amino acid sequence of SEQ ID NO:20 or 25.
- 41. (New) A kit comprising the polypeptide of claim 31 and instructions for use in a method of screening a compound that modulates a G protein-coupled receptor activity of the polypeptide.
- 42. (New) A kit comprising the polypeptide of claim 36 and instructions for use in a method of screening a compound that modulates a G protein-coupled receptor activity of the polypeptide.
- (New) A kit comprising the polypeptide of claim 37 and instructions for use in a 43. method of screening a compound that modulates a G protein-coupled receptor activity of the polypeptide.

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44. (New) A kit comprising the polypeptide of claim 40 and instructions for use in a method of screening a compound that modulates a G protein-coupled receptor activity of the polypeptide.